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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,111	02/21/2002	Ting-Wah Wong	PSS.0029P7US	4390

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EXAMINER
NADAV, ORI

ART UNIT	PAPER NUMBER
2811	

DATE MAILED: 12/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/081,111	Applicant(s) WONG ET AL.
	Examiner ori nadav	Art Unit 2811

-- The MAILING DATE of this communication appears on the cover sheet with the corresp ndence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 September 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) *11-19 and 27-30* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10 and 20-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 February 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Pri rity under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restriction

1. Applicant's election without traverse of Group II, claims 1-10 and 20-26 in Paper No. 4 is acknowledged.

Oath/Declaration

2. The oath/declaration filed on 02/21/2002 is acceptable.

Drawings

3. The formal drawings filed on 02/21/2002 are acceptable.

Information Disclosure Statement

4. The Information Disclosure Statement filed on 06/03/2002 has been considered.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Ryerson (3,525,911).

Ryerson teaches in figures 2 and 3 and related text a method comprising: forming a circuit element over a triple well 13, 12 in a substrate 10; and biasing a well 13 of the triple well through a resistor R, and including forming a P-type well 13 in an N-type well 12 formed in the substrate 10.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1, 3-5, 7-10, 20-21 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Momohara (6,055,655) in view of Ng (Complete guide to semiconductor devices, page 109).

Momohara teaches in figures 22A and 24 and related text a method comprising: forming a circuit element PMOS14 (figure 24) over a triple well 25-7, 22-7 in a substrate

10; and biasing a well of the triple well, forming a P-type well 25-7 in an N-type well 22-7 formed in the substrate, including biasing the N-type and P-type wells and providing a common bias potential to different wells, forming a complementary metal oxide semiconductor transistor over a triple well and biasing at least one of the wells of the triple well, forming a plurality of triple wells in the substrate and forming a circuit element over each of the triple wells, biasing at least one well of each of the triple wells through a common potential, wherein each of the potentials being applied to the wells. Momohara does not teach biasing a well of the triple well through a resistor.

Ng teaches on page 109, section 12.4 that the two main functions of a resistor are to limit current flow and to produce a voltage source from the current flow. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to supply voltage to Momohara's device through a resistor in order to provide the required voltage to the wells by using a well known voltage biasing method for distributing voltage to the device.

Regarding claims 4, 5, 10, 20, 21 and 24, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to bias a first well through a first resistor with a first bias potential, and to bias a second well through a second resistor, and to couple the first bias potential to the first and second wells through a common trace to a supply potential in Momohara's device, in order to operate Momohara's device by supplying accurate voltage in a well known and simple method.

The combination is motivated by the knowledge known to an artisan that the main function of a resistor is to provide accurate voltage source to semiconductor devices by distributing voltages across various resistors to determine the exact current required in each part of the device.

Regarding claim 7, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use resistors having a resistance greater than one hundred ohms in Momohara's device in order to provide the required voltage to the device.

9. Claims 2, 6, 22 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Momohara and Ng as applied to claims 1 and 20 above, and further in view of Applicant Admitted Prior Art (AAPA).

Regarding claims 6 and 25, Momohara and Ng teach substantially the entire claimed structure, as applied to claims 1 and 20 above, except using the analog circuit as a radio frequency circuit.

AAPA teaches on page 1, lines 21-22 that a radio frequency circuit is an analog circuit. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the analog circuit in Momohara's device as a radio

frequency circuit in order to use the device in its intended use, in an application which requires a radio frequency circuit.

Regarding claims 2 and 22, AAPA teaches that a radio frequency circuit comprises an inductor.

Regarding claim 26, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use resistors having a resistance greater than one hundred ohms in Momohara's device in order to provide the required voltage to the device.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reference A is cited as being related to triple wells.

Papers related to this application may be submitted to Technology center (TC) 2800 by facsimile transmission. Papers should be faxed to TC 2800 via the TC 2800 Fax center located in Crystal Plaza 4, room 4-C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). Th Group 2811 Fax Cent r number is (703) 308-7722

and 308-7724. The Group 2811 Fax Center is to be used only for papers related to Group 2811 applications.

Any inquiry concerning this communication or any earlier communication from the Examiner should be directed to *Examiner Nadav* whose telephone number is **(703) 308-8138**. The Examiner is in the Office generally between the hours of 7 AM to 4 PM (Eastern Standard Time) Monday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas, can be reached at **(703) 308-2772.**

Any inquiry of a general nature or relating to the status of this application should be directed to the **Technology Center Receptionists** whose telephone number is **308-0956**.

Ori Nadav

December 1, 2002